Arizona Department of Health Services

[For State/Local Use Only]
ID _____
EFORS _____

SUSPECTED VIRAL GASTROENTERITIS OUTBREAK FORM

Report to your Local Health Department within 24 hours of outbreak detection

General Information Date ____/____/____ (mm dd yy)

Primary contact person for epidemiologic investigation_____

Address _____ Telephone _____

_____ Facsimile _____

_____ Email _____

Outbreak Information

Date of first case ____/____/____ (mm dd yy) Date local health department notified ____/____/____ (mm dd yy)

Date of last case ____/____/____ (mm dd yy) Outbreak ongoing? Yes No

Location(s) of outbreak City _____ County _____

City _____ County _____

Institution or event (if applicable) _____ Date of event ____/____/____ (mm dd yy)
[e.g., nursing home, restaurant, bus tour, wedding, catered meal]

Institution or event contact person _____ Telephone _____

Illness Characteristics

Number of persons ill _____ Duration of illness (mean/median/range) _____

Number of persons susceptible _____ Incubation of illness (mean/median/range) _____

Predominant symptoms (frequencies if available)

_____

_____

_____

Number of persons who sought medical care _____ Number of persons admitted to a hospital _____
(e.g., emergency room, doctor=s office, medical clinic)

Suspected source(s) of exposure _____
e.g., water, specific food(s), ice, person, object]

Specimen Collection: to be coordinated with the local health department

Contact person for specimen collection and handling _____

Telephone _____ Facsimile _____

Number of **stool** specimens collected _____ Number of **vomitus** specimens collected _____

Tested for bacteria? Yes No Results (if known) _____

Tested for ova and parasites? Yes No Results (if known) _____

Stool and vomitus specimens collected from ill persons should be stored in watertight containers (e.g., urine specimen cups) and refrigerated (not frozen), and shipped on ice, accompanied by CDC form 50.34.

Date specimens shipped to Arizona State Lab ____/____/____ (mm dd yy) Specimen type _____

Date specimens shipped to Arizona State Lab ____/____/____ (mm dd yy) Specimen type _____

Date specimens shipped to Arizona State Lab ____/____/____ (mm dd yy) Specimen type _____

Comments:

THANK YOU

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RECOMMENDATIONS REGARDING SPECIMEN COLLECTION FOR DIAGNOSIS OF NLVs*

Clinical Specimens

Stool

Timing. Specimen collection for viral testing should begin on day 1 of the epidemiologic investigation. Any delays to await testing results for bacterial or parasitic agents could preclude establishing a viral diagnosis. Ideally, specimens should be obtained during the acute phase of illness (i.e., within 48--72 hours after onset) while the stools are still liquid or semisolid because the level of viral excretion is greatest then. With the development of sensitive molecular assays, the ability to detect viruses in specimens collected later in the illness has been improved. In specific cases, specimens might be collected later during the illness (i.e., 7--10 days after onset), if the testing is necessary for either determining the etiology of the outbreak or for epidemiologic purposes (e.g., a specimen obtained from an ill foodhandler who might be the source of infection). If specimens are collected late in the illness, the utility of viral diagnosis and interpretation of the results should be discussed with laboratory personnel before tests are conducted.

Number and Quantity. Ideally, specimens from ≥10 ill persons should be obtained during the acute phase of illness. Bulk samples (i.e., 10--50 ml of stool placed in a stool cup or urine container) are preferred, as are acute diarrhea specimens that are loose enough to assume the shape of their containers. Serial specimens from persons with acute, frequent, high-volume diarrhea are useful as reference material for the development of assays. The smaller the specimen and the more formed the stool, the lower the diagnostic yield. Rectal swabs are of limited or no value because they contain insufficient quantity of nucleic acid for amplification.

Storage and Transport. Because freezing can destroy the characteristic viral morphology that permits a diagnosis by EM, specimens should be kept refrigerated at 4 C. At this temperature, specimens can be stored without compromising diagnostic yield for 2--3 weeks, during which time testing for other pathogens can be completed. If the specimens have to be transported to a laboratory for testing, they should be bagged and sealed and kept on ice or frozen refrigerant packs in an insulated, waterproof container. If facilities for testing specimens within 2--3 weeks are not available, specimens can be frozen for antigen or PCR testing.

Vomitus

Vomiting is the predominant symptom among children, and specimens of vomitus can be collected to supplement the diagnostic yield from stool specimens during an investigation. Recommendations for collection, storage, and shipment of vomitus specimens are the same as those for stool specimens.

Serum

Timing. If feasible, acute- and convalescent-phase serum specimens should be obtained to test for a diagnostic ≥4-fold rise in IgG titer to NLVs. Acute-phase specimens should be obtained during the first 5 days of symptoms, and the convalescent-phase specimen should be collected from the third to sixth week after resolution of symptoms.

Number and Quantity. Ideally, 10 pairs of specimens from ill persons (i.e., the same persons submitting stool specimens) and 10 pairs from well persons (controls) should be obtained. Adults should provide 5--7 ml of blood, and children should provide 3--4 ml.

Storage. Specimens should be collected in tubes containing no anticoagulant, and the sera should be spun off and frozen. If a centrifuge is not available, a clot should be allowed to form, and the serum should be decanted and frozen. If this step cannot be accomplished, the whole blood should be refrigerated but not frozen.

Environmental Specimens

NLVs cannot be detected routinely in water, food, or environmental specimens. Nevertheless, during recent outbreaks (*33--36*), NLVs have been detected successfully in vehicles epidemiologically implicated as the source of infection. If a food or water item is strongly suspected as the source of an outbreak, then a sample should be obtained as early as possible and stored at 4 C. If the epidemiologic investigation confirms the link, a laboratory with the capacity to test these specimens should be contacted for further testing. If drinking water is suspected, special filtration (*45*) of large volumes (i.e., 5--100 liters) of water can concentrate virus to facilitate its detection.